

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**What is claimed is:**

1. (Currently Amended) A method of forming a ZnO nanorod array, which comprises:

coating on a substrate ZnO nanoparticles serving both as a buffer layer and a seed layer; and

growing the ZnO nanoparticles into crystals to form the ZnO nanorod array in a nutrient solution ~~containing nutrients~~ consisting ~~essentially~~ of hexamethylenetetramine, ~~[[and]]~~ at least one ~~nutrient~~ selected from the group consisting of Zn nitrate, Zn acetate, and a derivative thereof, and a solvent,

wherein the substrate ~~consists essentially of Si wafer or is made of Si~~, sapphire ( $\text{Al}_2\text{O}_3$ ), GaN,  $\text{ScAlMgO}_4$ , or  $\text{LiNbO}_3$ , and

wherein the operation of growing the ZnO nanoparticles in the nutrient solution is performed at 90 to 100 °C.

2. (Currently Amended) A method of forming a ZnO nanowall array, which comprises:

coating on a substrate ZnO nanoparticles serving both as a buffer layer and a seed layer; and

growing the ZnO nanoparticles into crystals to form the ZnO nanowall array in a nutrient solution ~~containing nutrients~~ consisting ~~essentially~~ of sodium citrate, ~~[[and]]~~ at least one ~~nutrient~~ selected from the group consisting of Zn acetate and its derivative, and a solvent,

wherein the substrate ~~consists essentially of Si wafer or is made of Si~~, sapphire ( $\text{Al}_2\text{O}_3$ ), GaN,  $\text{ScAlMgO}_4$ , or  $\text{LiNbO}_3$ , and

wherein the operation of growing the ZnO nanoparticles in the nutrient solution is performed at 90 to 100°C.

3. (Cancelled)

4. (Previously Presented) The method of claim 1, wherein a volume ratio of Zn nitrate, Zn acetate, or a derivative thereof, to hexamethylenetetramine in the nutrient solution is 10:1 to 1:10.

5. (Previously Presented) The method of claim 2, wherein a volume ratio of Zn acetate or its derivative to sodium citrate in the nutrient solution is 10:1 to 1:10.

6. (Original) A ZnO nanorod array formed by the method of claim 1.

7. (Original) A ZnO nanowall array formed by the method of claim 2.

8. (Cancelled)

9. (Cancelled)

10. (Currently Amended) The method of claim 1, wherein the ~~nutrients of the~~ nutrient solution consists of ~~are~~ hexamethylenetetramine, ~~and~~ Zn nitrate and a solvent.

11. (Cancelled)

12. (Cancelled)

13. (Currently Amended) The method of claim 2, wherein the ~~nutrients of the~~ nutrient solution consists of ~~are~~ Zn acetate ~~and~~, sodium citrate and a solvent.